

FEB 20 1915

1915

CATALOGUE No. 25

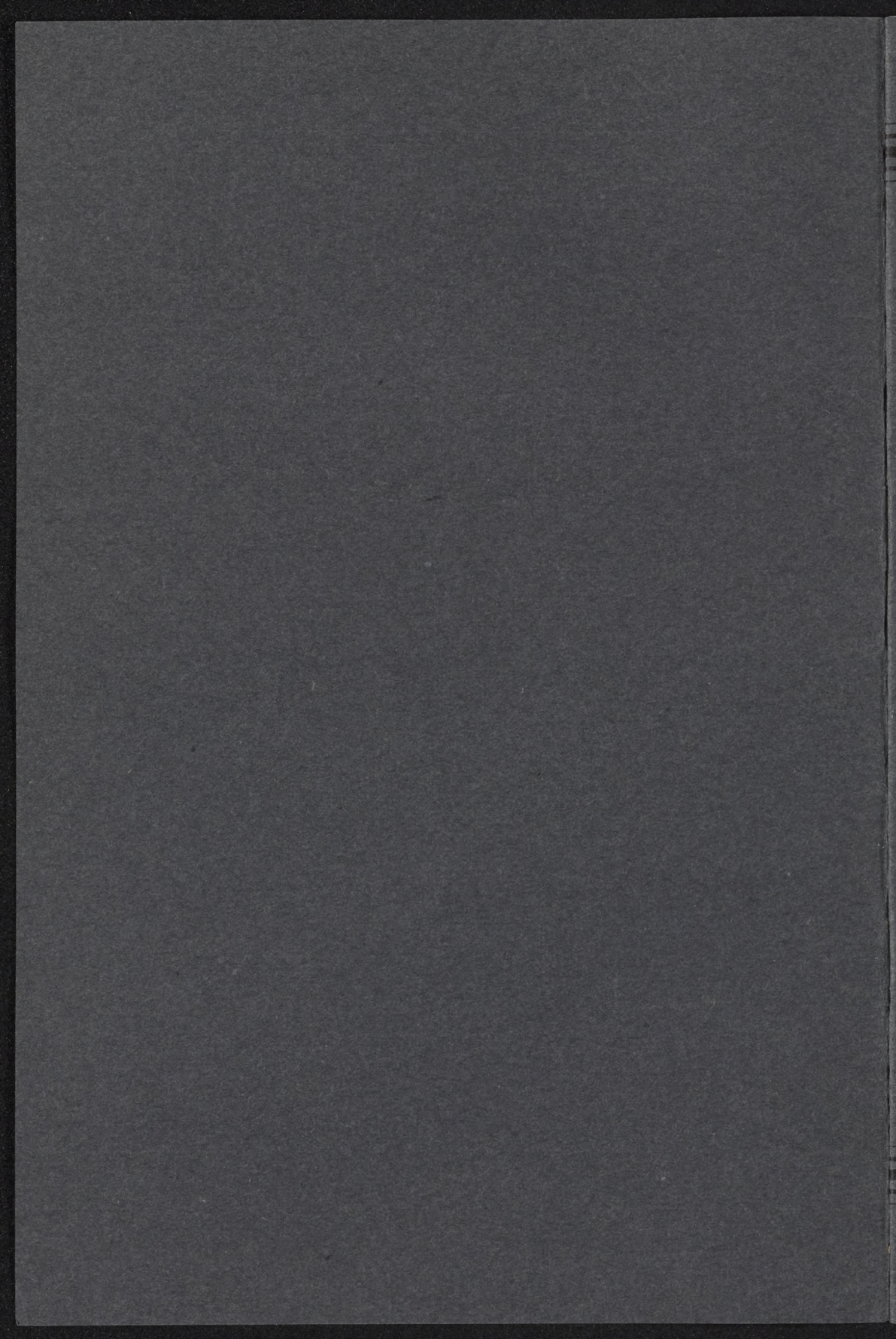
HAYING AND HARVESTING
MACHINERY



BYRON JACKSON IRON WORKS
WEST BERKELEY, CAL.

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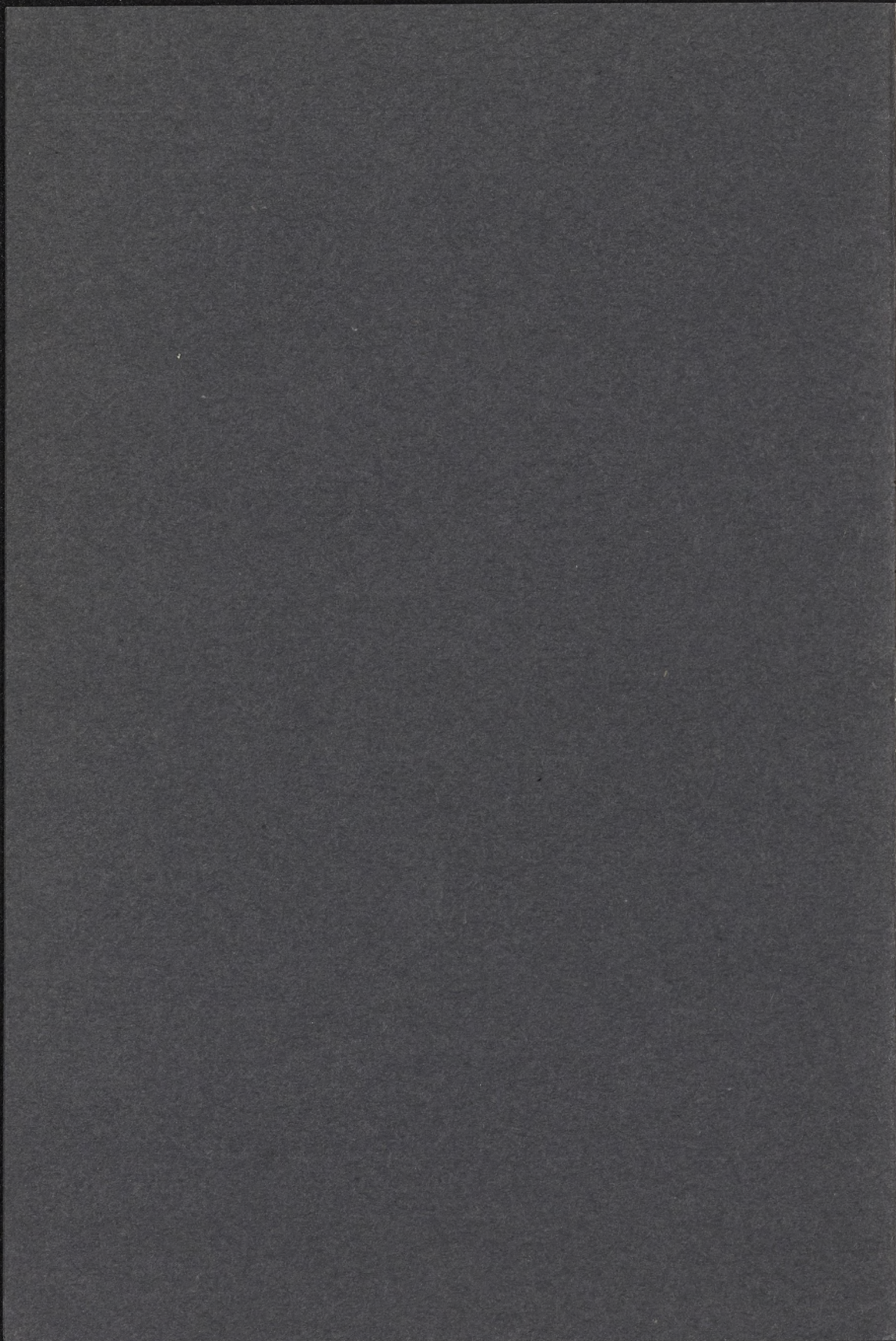
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HAYING AND HARVESTING
MACHINERY



BYRON JACKSON IRON WORKS
WEST BERKELEY, CAL.



No. 25

CATALOGUE

OF

Haying and Harvesting
MACHINERY

Manufacturers of

PUMPING, POWER, MINING
AND HARVESTING
MACHINERY

Byron Jackson Iron Works

OFFICE AND WORKS :

CARLTON STATION, WEST BERKELEY, CAL.

U. S. A.

INTRODUCTORY

In the following pages will be found a brief, yet (it is hoped) sufficiently complete description of the Jackson Harvesting Machinery, which has been in continuous and extended use for the past thirty years, and the merits of which must be quite familiar to every hay and grain-grower on the Pacific Coast at least, and therefore requires no PUFF in these pages.

During the past twenty years a great deal of the attention of our works has been devoted to the manufacturing of Hydraulic Machinery for the irrigation and reclaiming of land, mining, etc. In that time a business of such great extent has been developed that it is impossible to more than mention it here; but a complete and thoroughly illustrated catalogue of this branch of the business has been issued, and may be had on application, in which will be found descriptions of a complete line of Centrifugal Pumps, ranging from the smallest to the largest ever made, together with illustrations of their various applications or uses.

We also handle Pipe and Fittings.

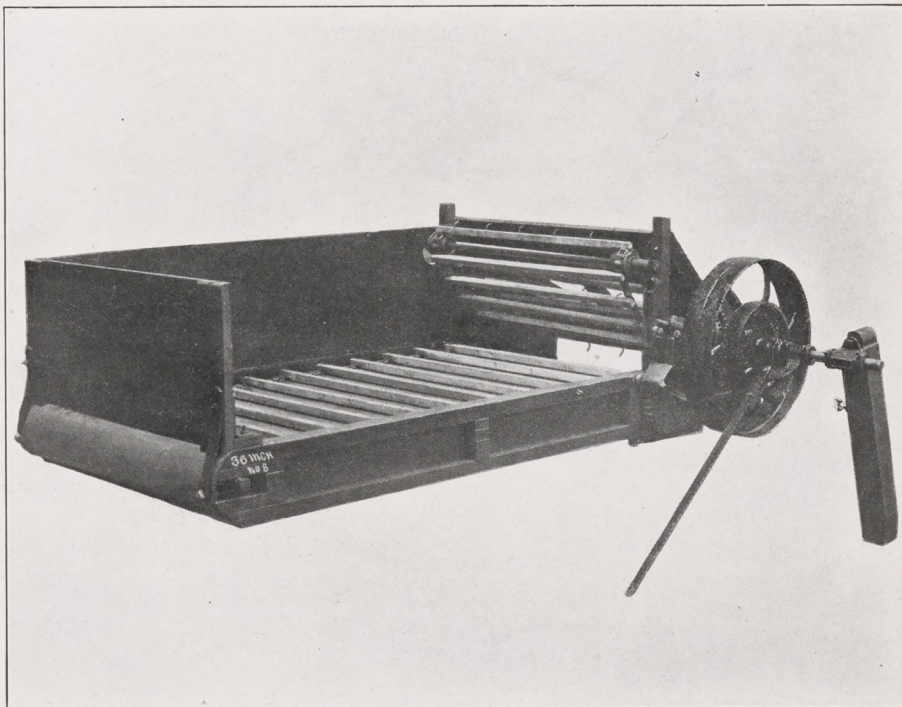
We desire to thank you for past favors and solicit a continuance of your valued patronage.

Respectfully,

BYRON JACKSON IRON WORKS.

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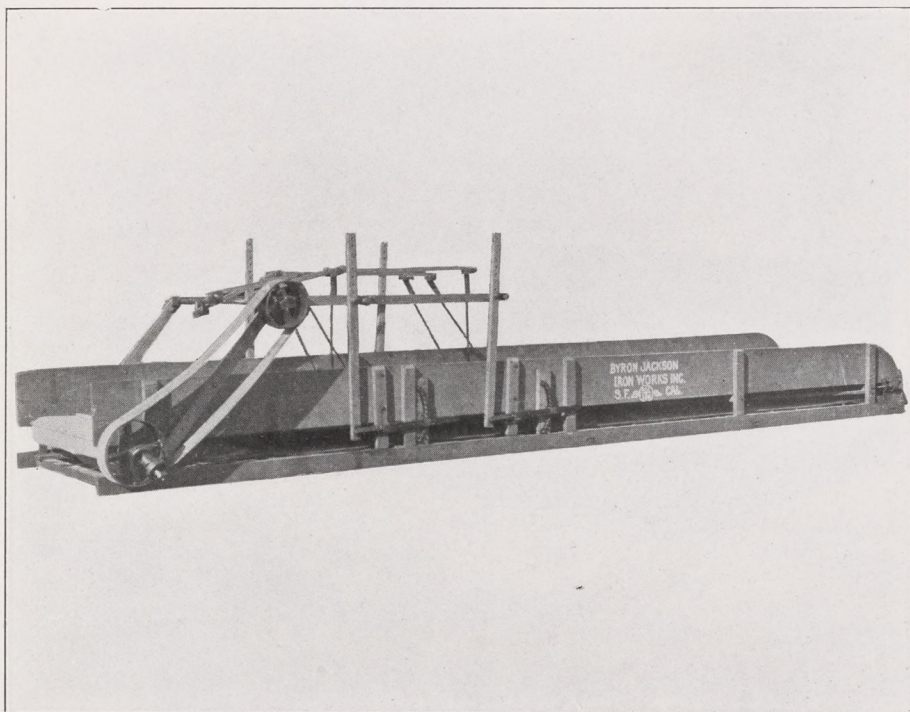


Jackson No. 8 Self Feeder

The above illustration shows Jackson No. 8 Self Feeder. Length of carrier 12 feet 4 inches.

In ordering Feeder give name of Separator and length of Cylinder.

	Weight
No. 8 Jackson Self Feeder, any size. Complete with elevator and spreader.....	950 lbs.
No. 8 Jackson Self Feeder, any size. Without elevator and spreader.....	750 lbs.

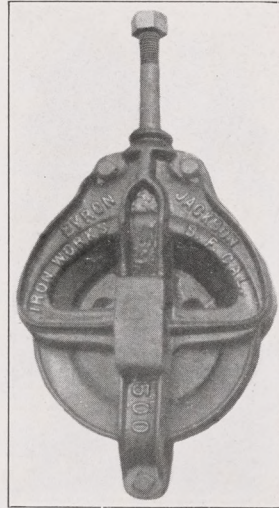
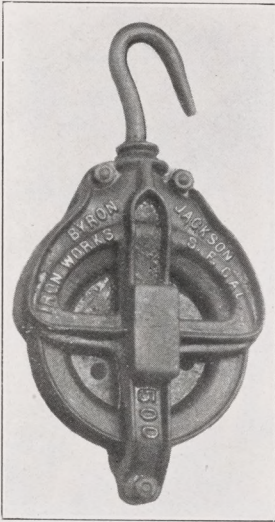


Jackson Side Elevator with Spreader Attached

Standard Width 40 inches. Length as required.

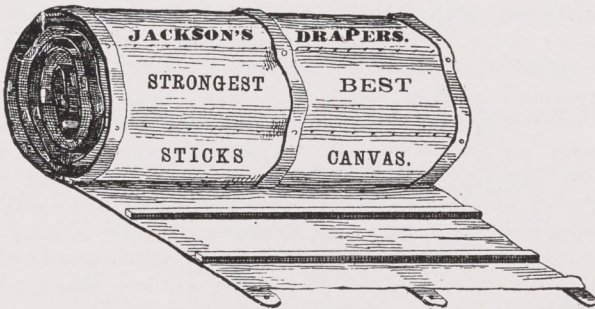
The above Elevator and Spreader used in connection with the Self Feeder illustrated on page 3 are now used with nearly all threshers on the Pacific Coast.

This combination is used to pass headed grain from the stack to the cylinder of the thresher.



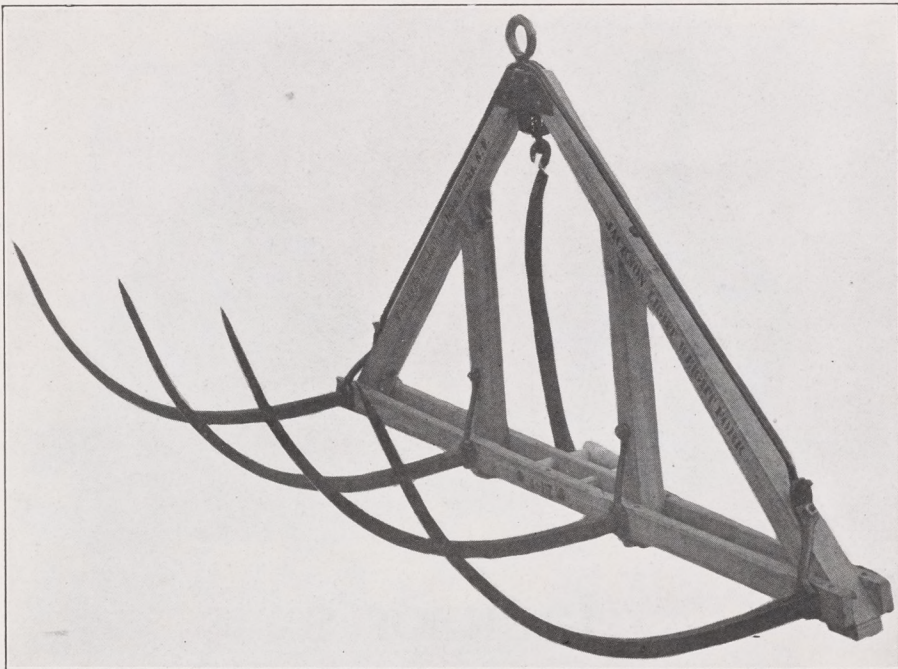
Jackson's Iron Pulley Blocks

These Blocks have Patent Hardwood Bearing Boxes which, if kept oiled, insure durability and easy running. They have either hook or bolt to hang up or bolt to floor, and 8-inch diameter sheave for Manila rope or steel wire cable.



Elevator Drapers

Any length or width, with two or three straps, with or without buttons or clips.



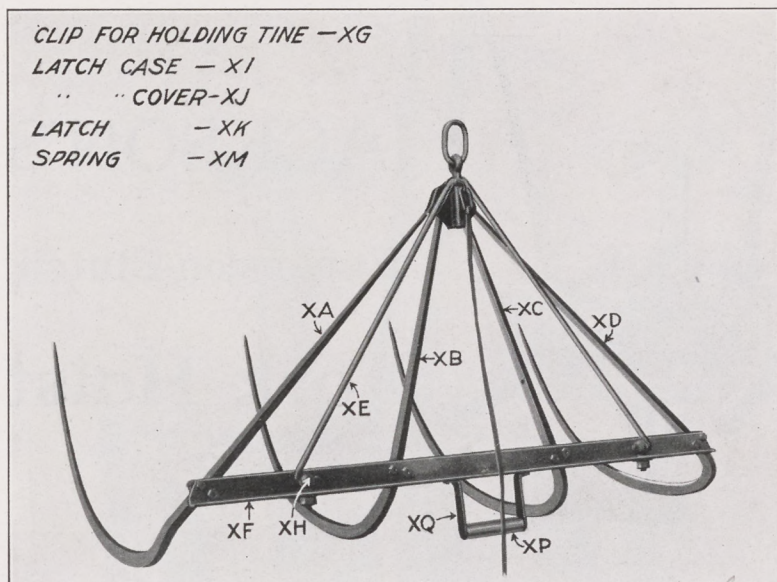
Jackson's Hickory "Lightweight" Forks

FITTED WITH OIL TEMPERED PICK STEEL TINES.

"Nothing succeeds like success." When the Jackson Light Weight Horse Fork was introduced, it immediately superseded the heavy and clumsy implements previously in use, so that the manufacturers found it impossible to sell them at any price.

The pre-eminent merit of the Jackson Light Weight Fork and the great demand for it attracted the attention of manufacturers hungry for business, who commenced the manufacture of and offered on the market, Forks practically identical with the "Jackson," but trusted in technical evasion and slight differences in construction to avoid infringing the Jackson patents, and consequent suits for royalty and damages. Suits have been commenced against every design of Horse Forks brought to notice which infringed the above patents. In every case the decree of Court has been in favor of the validity of these Patents and against the infringing Fork.

If offered a substitute for the genuine Jackson Fork a close examination will undoubtedly expose eucalyptus or second grade hickory in frame and inferior steel in tines. We use only the best grade of hickory in the manufacture of our forks.



Jackson All Steel Improved Light Weight Fork

PATENT PENDING

ESPECIALLY DESIGNED FOR EXTRA HEAVY WORK

MADE OF OIL TEMPERED PICK STEEL.

STRONGER THAN WOOD FRAME FORK.

Simpler Construction—Greater Capacity.

Every Bolt is Provided with an Especially Designed Nut-Lock.

We are equipped to furnish any type or size Fork fitted with from 3 to 8 tines of standard length, or longer or shorter than standard.

Sizes		Weight
3 feet.....	4 tines.....	59 lbs.
3½ feet.....	4 tines.....	62 lbs.
4 feet.....	4 tines.....	64 lbs.
4½ feet.....	4 tines.....	67 lbs.
5 feet.....	6 tines.....	89 lbs.
6 feet.....	6 tines.....	92 lbs.

State your needs and we will quote prices.

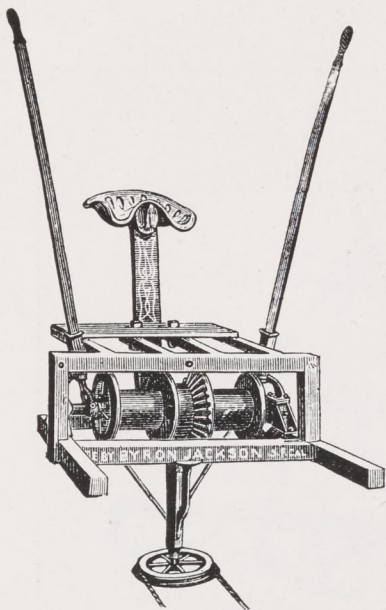


Fig. 205

JACKSON'S

Expansion-Clutch

Fork Hoist

The Fork Hoist is bolted to the rear end of the Derrick, and lifts the forks by power transmitted to it through the long rope running from the engine. One man operates it, whether two or three forks are used, saving the labor of one man and two spans of horses, required when the Hoist is not used.

There is no surplus rope to be dragged back and forth on the ground, and the rope which is used will uncoil freely from the drum, offering no resistance to the fork being pulled back to the forkman, and set for another load. This is of great importance, as it lightens the labor of the forkman, so that any laborer can run a JACKSON LIGHT-WEIGHT FORK.

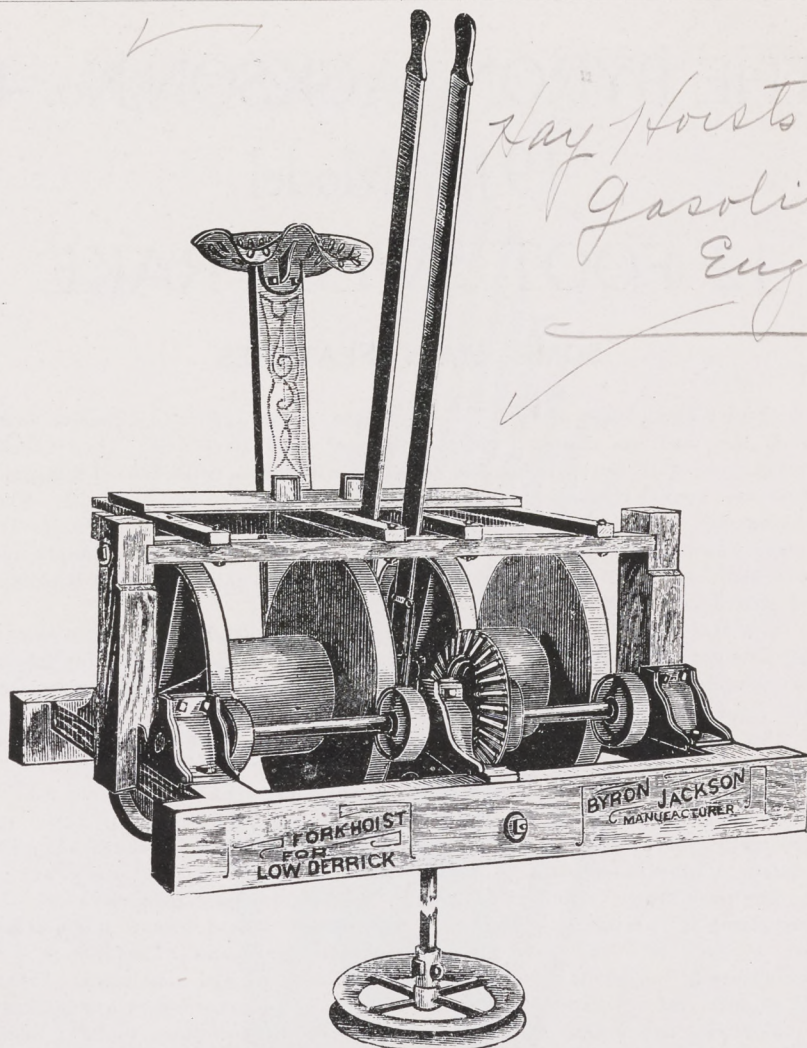
WIRE ROPE—Wire rope should be used to hoist the forks when a Fork Hoist is used. $\frac{3}{8}$ -inch diameter wire rope is amply strong, and the quality recommended by wire rope manufacturers is known as iron hoisting rope, nineteen wires to the strand. The length most generally used is 100 feet. In using wire rope some prefer to lag the hoist drums with old Manila rope, increasing their diameter; the larger the diameter of drum, the longer the rope will last. Care should be taken to wind rope on the drums true, and not to "kink" it. It is desirable to use a little linseed oil on it.

With our Hoists we include a two Sheave corner turner, also a ring Sheave to attach to spokes of engine drive wheel, or if preferred we will furnish in place of the latter a Sheave bored and key seated to fit engine shaft.

DRIVE ROPE from Engine to Hoist.—Use $\frac{3}{4}$ -inch diameter Manila rope.

We recommend that the rope be spliced and dipped in a compound of resin and oil.

	Weight	Diameter of Drum	Length of Drum
Jackson's Expansion Clutch Fork Hoist with 2 drums for 2 forks.....	850 lbs.	8 in.	10 in.
Jackson's Expansion Clutch Fork Hoist with 3 drums for 3 forks.....	1200 lbs.	8 in.	10 in.



Jackson's Friction Drum Fork Hoist

The above Hoist is somewhat similar to Fig. 305 on the opposite page with the exception that this is constructed with a friction drum. Some prefer the Expansion Clutch Hoist, while others like the friction drum the best.

The description on the Expansion Clutch Hoist, page 8, will apply to the Friction Drum Hoist also.

Above hoists also made with 8-inch diameter drums but $4\frac{1}{8}$ inches long. Cable only should be used with these narrow drums.

	Weight	Diameter of Drum	Length of Drum
Jackson's Friction Drum Fork Hoist with 2 drums for 2 forks.....	900 lbs.	8 in.	$9\frac{3}{4}$ in.
Jackson's Friction Drum Fork Hoist with 3 drums for 3 forks.....	1200 lbs.	8 in.	$9\frac{3}{4}$ in.

THE BYRON JACKSON No. 4

1915 Model

12 FOOT SWEEP RAKE

SOME MAIN FEATURES

Main Wheels, made of steel with iron hubs, are 28 inches in diameter with 4-inch face and are mounted on a continuous solid steel axle. The Wheels are equipped with heavy removable bushings which turn with the wheels, also there are heavy removable sleeves that are stationary on the axle. The bushings and the sleeves prevent any wear to either the wheels or the axle. To replace boxes and sleeves, the main Wheels remain in position. Simply remove short grooved wood pieces under each end of axle and take bushings and sleeves out and slip new ones on.

The Main Wheels are supported by four heavy upright steel angle pieces and wrought braces which are attached to heavy cross piece or top head. The $\frac{1}{2}$ -inch truss rod passes through all the angle pieces. This makes the most rigid frame possible.

Our new ratchet lifting device is very simple and has nothing to break or get out of order and is capable of lifting the heaviest of loads.

There are 13 teeth, each 9 feet long (much longer than on any other rake), each having pressed steel point (or C. I. point, if preferred), so shaped to keep teeth from digging in the ground. The butt end of each tooth has bolt through to prevent splitting.

The push frame is built with heavier timber than any rake we know of. This frame is parallel in shape. The rear wheels are 18 inches in diameter with $3\frac{1}{2}$ -inch face and have heavy removable hub boxes. The castors for rear wheels fit in sockets which are bolted to push poles and doubletree. Front end of push frame is attached to rear head of rake by extra heavy eye bolts.

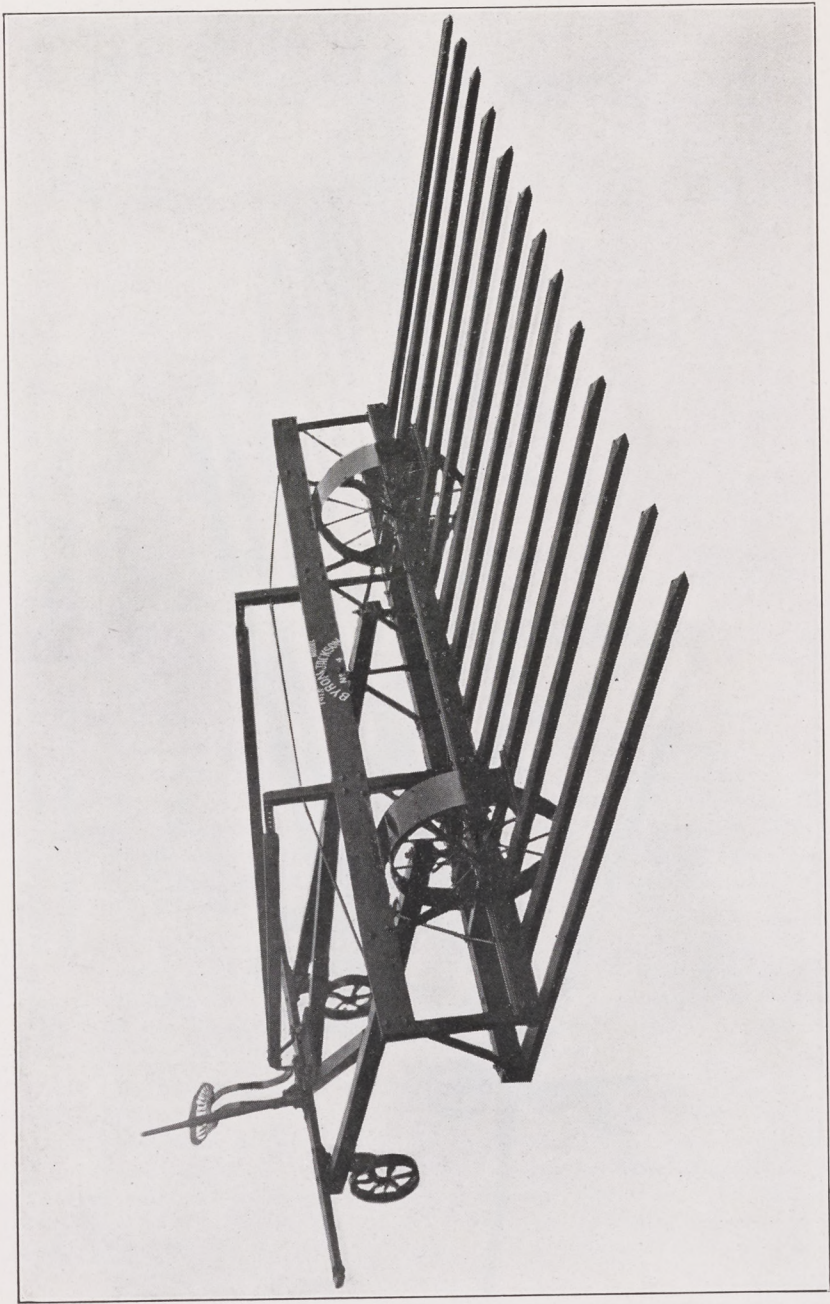
You will notice that the top head is rigidly braced down to back head by heavy wrought iron braces, also the axle frame is supported strongly to rear head by six heavy wrought braces. The Main Wheels are supplied with two oil holes each and castor wheels and castors with one each. The large diameter wheels insure easy draft. The steel fenders over main wheels are 8 inches wide with side braces to prevent the hay from getting into wheels.

When teeth are raised to horizontal position, the clearance under teeth is $8\frac{1}{2}$ inches. This clearance may be increased or decreased by using larger or smaller wheel.

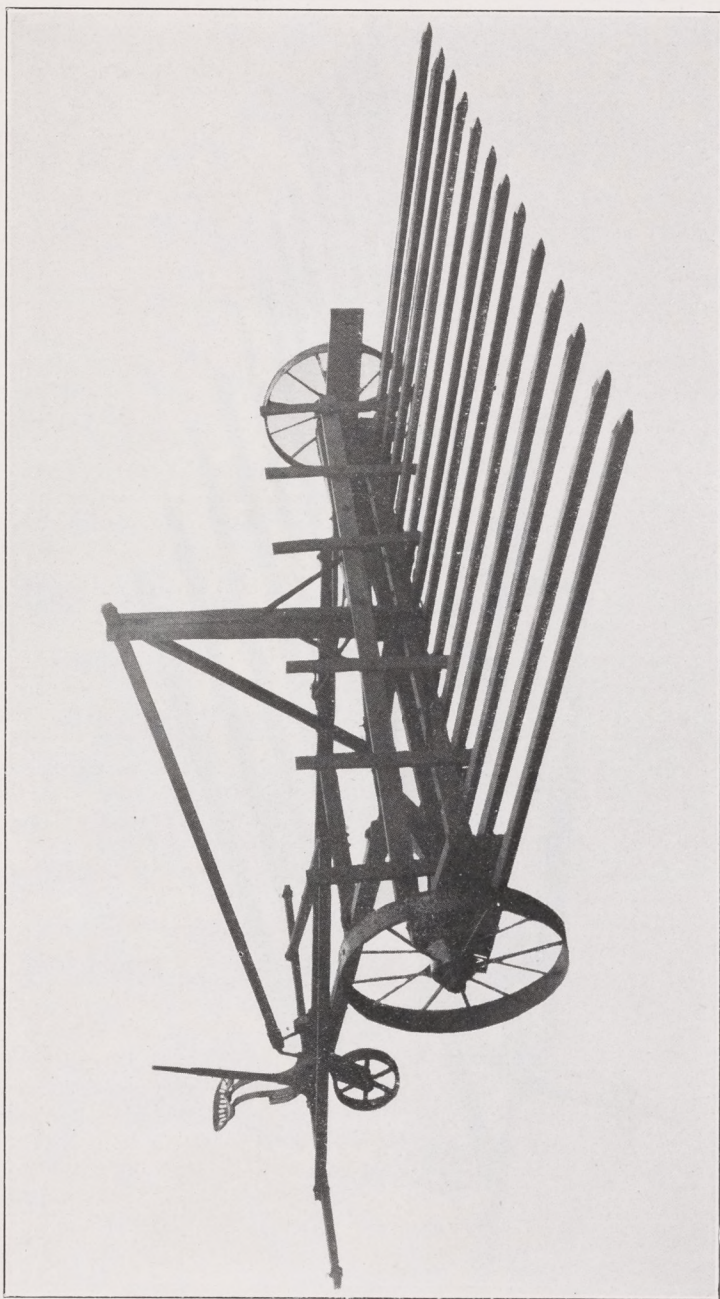
All washers furnished with the rake are of heavy cast iron. This prevents the bolt heads and nuts from cutting into the wood.

All lumber used in the construction of our rakes is best quality straight grained, air dried, Oregon Pine, free from knots, etc.

With a little attention this rake should last a lifetime.



Byron Jackson No. 4—1915 Model Sweep Rake.— Made with 3 or 4 wheels.



JACKSON'S IMPROVED ACME BUCK RAKE.
Made with 3 or 4 Wheels. See Page 13 for Reading Matter.

Jackson's Improved "Acme" Rake and Buck Combined

(Made with 3 or 4 wheels)

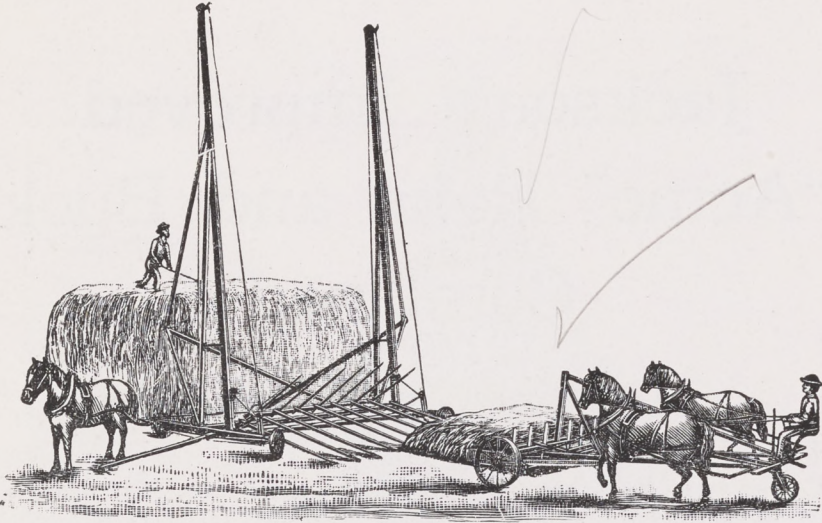
This rake does the work of all other rakes—wire rakes, sulky rakes, revolving rakes, buck rakes, and "go-devils." No other rake need be used, or can be used, with advantage, in making hay. It rakes from the swath and leaves the hay in large bunches at once, requiring no hard work. It is designed to rake the hay into large bunches direct from the mower, and to take up these bunches and carry them to the stacker, after they are sufficiently cured. It has no equal for making large bunches, and there is no necessity for windrowing the hay, as the rake will take it direct from the swath, as left by the mower, thus saving all the labor of windrowing and cocking. Teeth are fitted with steel points or cast iron points if desired.

To bunch the hay, the rake is driven until a full load is obtained, when it describes a quarter turn, backs from under the load, and, turning back into the swath, resumes raking. This leaves the bunches about twelve feet, or the width of the rake apart; and as the hay, when taken from the swath, is pushed on the rake in the same shape that it lay in the swath, it is in nice shape for drying, (requiring little or no dressing by hand), and for being taken up again to go to the stacker.

One man and two horses will keep up with two mowers, following the mower as soon as the hay is wilted enough to be raked clean with any rake. It rakes **cleaner**. The hay will cure **quicker** without bleaching by dew or sun. Very large bunches can be made by pushing from two to six rakefuls into one. This rake is fitted with our new ratchet lifting attachment.

If raked and bunched by the Improved "Acme" Rake, the hay is in very much better shape to reload and deliver on the Stacker evenly and level (loading the rakes all they will carry to the stack), and spreads well over the stack, saving labor in stacking, because it has not been tangled, as it is when gathered with the sulky or revolving rake. Bear in mind that windrowing hay with any rake is labor thrown away, and is detrimental to the neat and most economical working of the "Acme" Hay Harvesting Machinery.

Acme Rake and Buck Combined. Size, 12 ft., Weight 800 lbs.



Jackson's "Eclipse" Hay Stacker

This is the standard stacker; and is an improvement on all others, as it is lighter, stronger, and dumps the hay at any desired height, instead of carrying it all up over itself, without regard to height of stack. This latter point is quite important in stacking in windy weather, as with the "Eclipse" the hay is only raised as high as necessary to dump it on the stack, and is not scattered by the wind. The uprights of the "Eclipse" are made 28 to 32 feet high, as this is as long as they can be shipped, and with them it will stack nearly or quite that height, but the height it may be made to stack is really unlimited, as these uprights may be spliced out as high as desired, and guyed with rope.

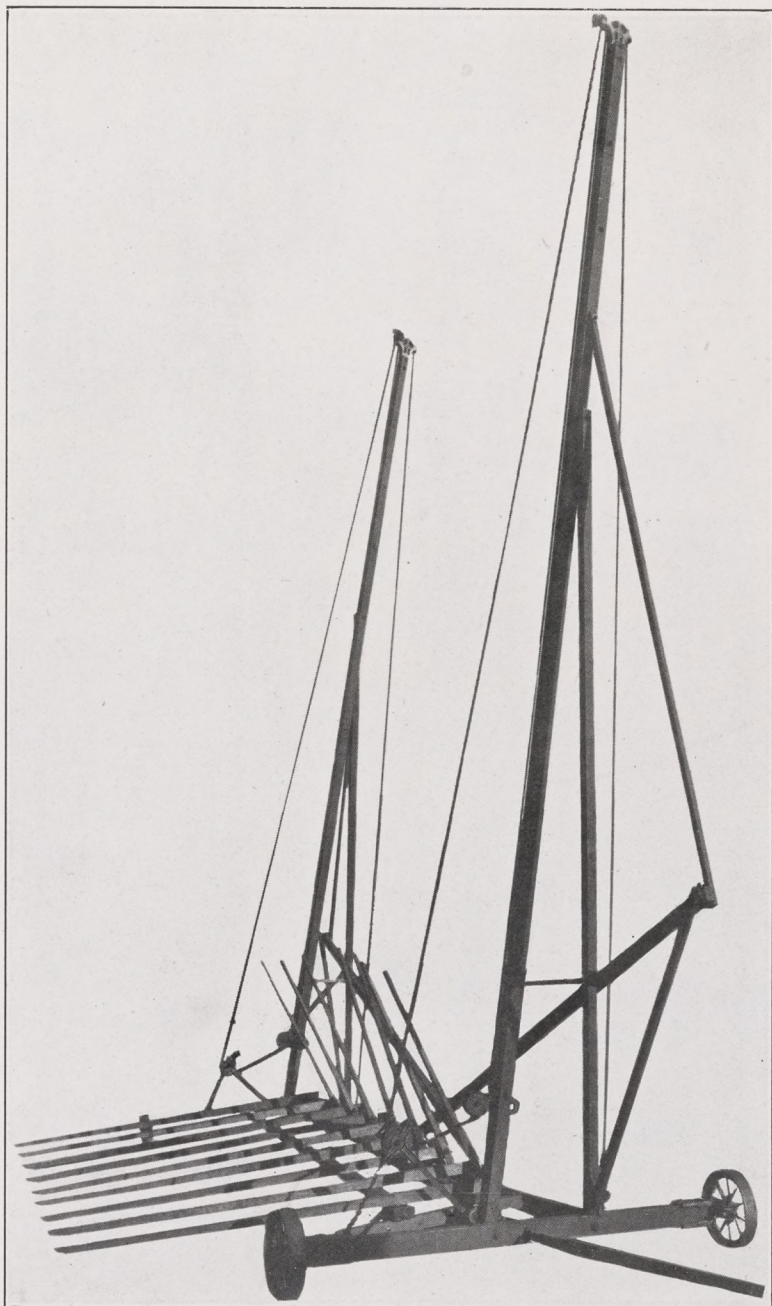
This stacker is now equipped with large sheaves which makes light draft and do not injure the rope or cable.

This machine is made under the "Aeme" and "Oliver" patents. It is mounted on castiron wheels, and with 28-foot masts will build a stack 25 feet high.

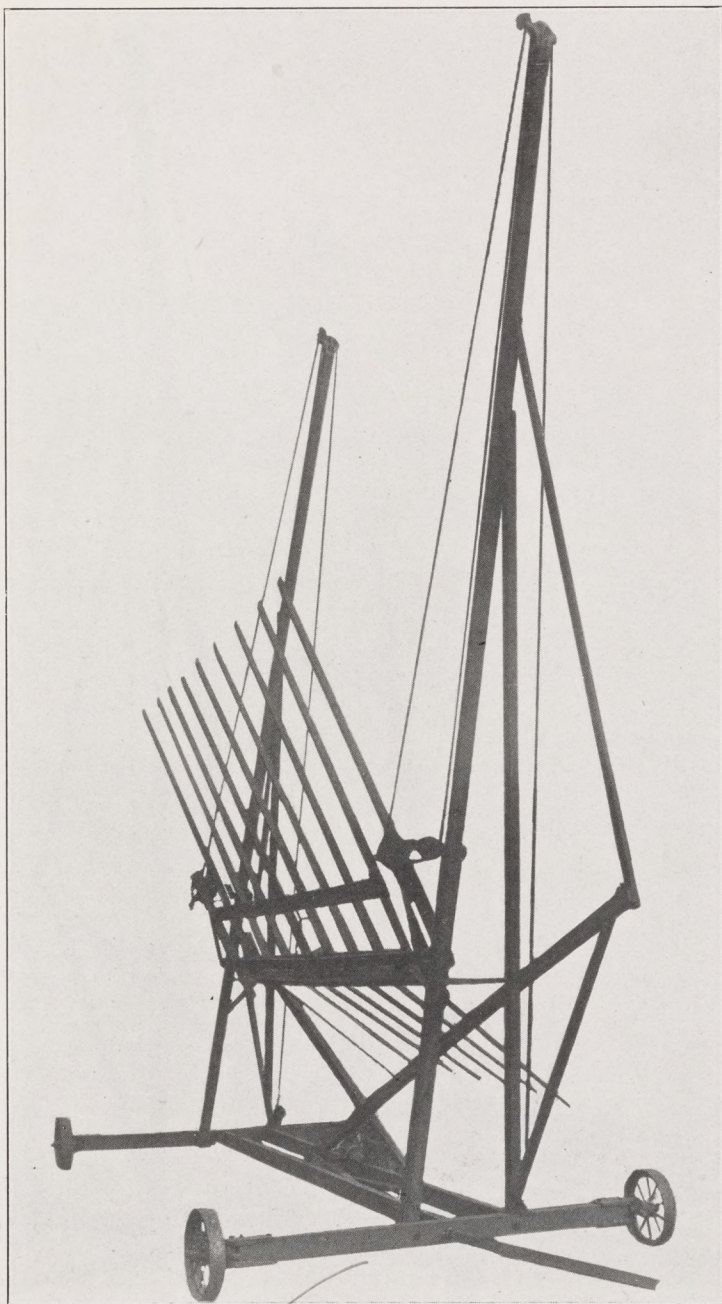
With the rakes the hay is taken from the swath, when cured, just as left by the mower, or from the cock or windrow, if it is desired to rake it before it is cured sufficiently to stack; and when the Rake is loaded it is driven to the Stacker, the rake-teeth entering between the pitcher-teeth; the hay is pressed forward against the pitcher-head, the horses then back the Rake off, leaving the hay in a compact mass upon the pitcher, and return to the field for another load. As soon as the Rake is out of the way, the horse attached to the pitcher rope is started, elevating the load the desired height, automatically tripping same, and the hay is dropped in the center of the stack, the horse is backed up, the pitcher being brought back to the ground by its own weight, ready for another load. The pitcher teeth are 10 feet long and $15\frac{1}{2}$ across. Clearance between pitcher masts is $16\frac{1}{2}$ feet.

The "Eclipse" has special advantages for stacking in windy weather, and for loading hay, etc., on wagons. It dumps the load at any desired height, from 5 to 25 feet, while it is easily moved and quickly set.

"Eclipse" Hay Stacker and Loader, Standard Height 28 feet.
Special Height 30 or 32 feet. Weight 1700 pounds.



JACKSON'S "ECLIPSE" HAY STACKER.
In Position to Receive the Hay.



JACKSON'S "ECLIPSE" HAY STACKER AFTER DISCHARGING LOAD.

